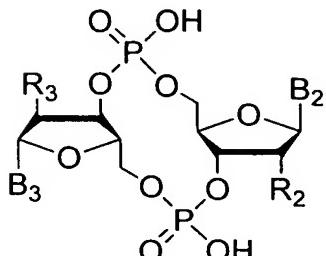


## CLAIMS

1. A method for synthesizing a compound represented by Formula [2]:

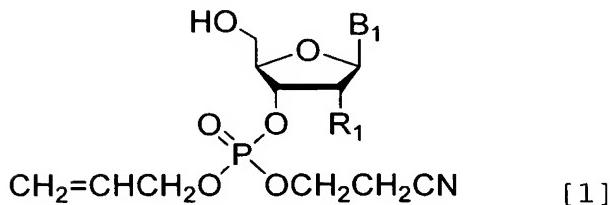


5 [2]

wherein R<sub>2</sub> and R<sub>3</sub> each independently represent a hydrogen atom, a halogen atom, a methoxy group, a 2-methoxyethoxy group or a hydroxyl group; and B<sub>2</sub> and B<sub>3</sub> each independently represent a nucleic acid base,

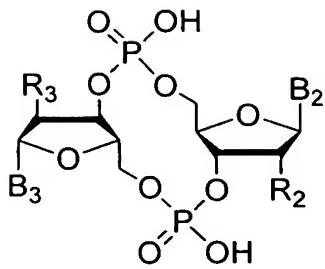
10 or a salt thereof from a compound represented by

Formula [1]:



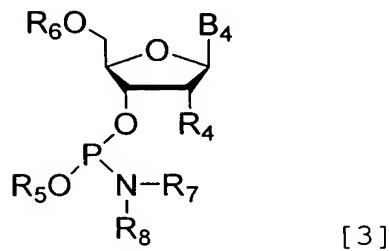
wherein R<sub>1</sub> represents a hydrogen atom, a halogen atom, a methoxy group, a 2-methoxyethoxy group, or a hydroxyl group substituted with a hydroxyl protective group; and B<sub>1</sub> represents a nucleic acid base which may be protected.

15 2. A method for synthesizing a compound represented by Formula [2]:



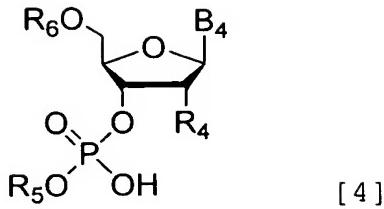
wherein  $R_2$ ,  $R_3$ ,  $B_2$  and  $B_3$  have the same meanings as defined for  $R_2$ ,  $R_3$ ,  $B_2$  and  $B_3$  of Formula [2] in claim 1 above,  
or a salt thereof from a compound represented by

5      Formula [3]:



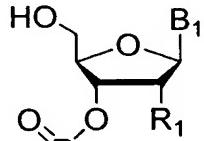
wherein  $R_4$  represents a hydrogen atom, a halogen atom, a methoxy group, a 2-methoxyethoxy group, or a hydroxyl group substituted with a hydroxyl protecting group;  $B_4$  represents  
10 a nucleic acid base which may be protected;  $R_5$  represents an allyl group or a 2-cyanoethyl group;  $R_6$  represents a hydroxyl protecting group; and  $R_7$  and  $R_8$  each independently represent an alkyl group having 1 to 4 carbon atoms, or  $R_7$  and  $R_8$  may be bonded to form a ring containing a nitrogen  
15 atom,

or a compound represented by Formula [4]:



wherein  $R_4$ ,  $R_5$ ,  $R_6$  and  $B_4$  have the same meanings as defined for  $R_4$ ,  $R_5$ ,  $R_6$  and  $B_4$  of Formula [3] above,

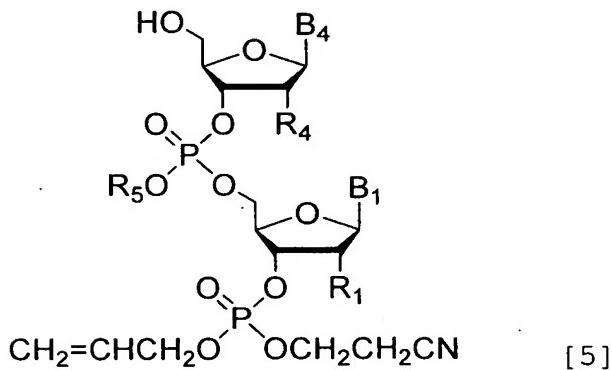
and from a compound represented by Formula [1]:



5  $\text{CH}_2=\text{CHCH}_2\text{O} \begin{cases} \diagdown \\ \diagup \end{cases} \text{OCH}_2\text{CH}_2\text{CN}$  [1]

wherein  $R_1$  and  $B_1$  have the same meanings as defined for  $R_1$  and  $B_1$  of Formula [1] in claim 1 above.

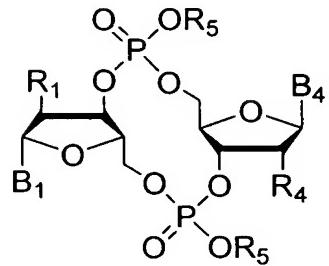
3. The method according to claim 1 or 2, wherein the  
10 synthetic intermediate is a compound represented by Formula  
[5]:



wherein R<sub>1</sub> and R<sub>4</sub> each independently represent a hydrogen atom, a halogen atom, a methoxy group, a 2-methoxyethoxy group, or a hydroxyl group substituted with a hydroxyl

protecting group;  $B_1$  and  $B_4$  each independently represent a nucleic acid base which may be protected; and  $R_5$  is an allyl group or a 2-cyanoethyl group.

- 5        4. The method according to claim 1 or 2, wherein the synthetic intermediate is a compound represented by Formula [6]:



wherein  $R_1$ ,  $R_4$ ,  $R_5$ ,  $B_1$  and  $B_4$  have the same meanings as defined for  $R_1$ ,  $R_4$ ,  $R_5$ ,  $B_1$  and  $B_4$  of Formula [5] in the previous claim.

- 10      5. The method according to claim 1, wherein with respect to Formula [1],  $R_1$  is a hydrogen atom, a fluorine atom, a methoxy group, a 2-methoxyethoxy group or a t-butyldimethylsilyloxy group; and with respect to Formula [2],  $R_2$  and  $R_3$  each independently represent a hydrogen atom, a fluorine atom, a methoxy group, a 2-methoxyethoxy group or a hydroxyl group.

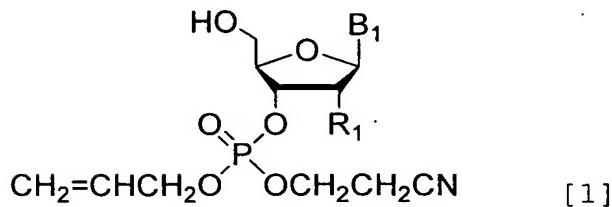
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6. The method according to claim 2, wherein with respect to Formulas [1], [3] and [4],  $R_1$  and  $R_4$  each independently represent a hydrogen atom, a fluorine atom, a methoxy group,

a 2-methoxyethoxy group or a t-butyldimethylsilyloxy group; and with respect to Formula [2], R<sub>2</sub> and R<sub>3</sub> each independently represent a hydrogen atom, a fluorine atom, a methoxy group, a 2-methoxyethoxy group or a hydroxyl group.

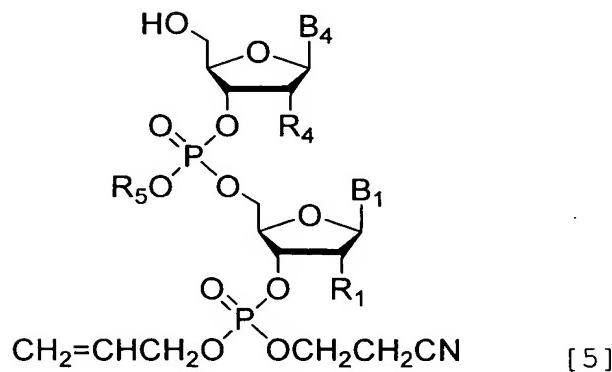
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7. A compound represented by Formula [1]:



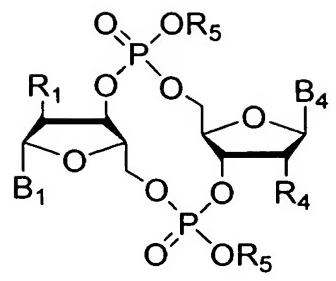
wherein R<sub>1</sub> has the same meaning as defined for R<sub>1</sub> of Formula 10 [1] in claim 1 above; and B<sub>1</sub> represents a nucleic acid base which may be protected.

8. A compound represented by Formula [5]:



wherein R<sub>1</sub>, R<sub>4</sub>, R<sub>5</sub>, B<sub>1</sub> and B<sub>4</sub> have the same meanings as 15 defined for R<sub>1</sub>, R<sub>4</sub>, R<sub>5</sub>, B<sub>1</sub> and B<sub>4</sub> of Formula [5] in claim 3 above.

9. A compound represented by Formula [6]:



wherein  $R_1$ ,  $R_4$ ,  $R_5$ ,  $B_1$  and  $B_4$  have the same meanings as defined for  $R_1$ ,  $R_4$ ,  $R_5$ ,  $B_1$  and  $B_4$  of Formula [6] in claim 4 above.